State of Utah Administrative Rule Analysis

Revised November 2021

NOTICE OF PROPOSED RULE				
TYPE OF RULE: New; Amendment _X; Repeal; Repeal and Reenact				
	Title No Rule No Section No.			
Utah Admin. Code Ref (R no.):	R307-506	Filing ID (Office Use Only)		
Changed to Admin. Code Ref. (R no.):	R			

Agency Information

Agoney information				
1. Department:	Department of Environmental Quality			
Agency:	Division of Air Quality			
Room no.:				
Building:	MASOB			
Street address:	195 North 1950 West			
City, state and zip:	Salt Lake City, Utah 84116			
Mailing address:	P.O. Box 144820			
City, state and zip:	Salt Lake City, Utah 84114-4820			
Contact person(s):				
Name:	Phone:	Email:		
Bo Wood	385-499-3416	rwood@utah.gov		
Sheila Vance	801-518-3132 svance@utah.gov			
Please address questions regarding information on this notice to the agency.				

General Information

2. Rule or section catchline:

R307-506. Oil and Gas Industry: Storage Vessel

3. Purpose of the new rule or reason for the change (Why is the agency submitting this filing?):

These amendments are necessary to align current oil and gas rules with new data from studies and compliance inspections. These changes reflect more accurate emission calculations that indicate a previous underestimation of VOC emissions from tanks and other components. The proposed changes will ensure the protection of air quality standards and improve compliance with required emission controls.

4. Summary of the new rule or change (What does this filing do? If this is a repeal and reenact, explain the substantive differences between the repealed rule and the reenacted rule):

This rule modifies the definition of "emergency storage relief vessel", removes an applicability exemption previously granted to producing wells with an approval order issued under R307-401, modifies storage vessel requirements for emission controls and adds a requirement to submit site specific data to UDAQ when it is used.

Fiscal Information

5. Provide an estimate and written explanation of the aggregate anticipated cost or savings to:

A) State budget:

The fiscal impact from these amendments on the state budget for FY22, FY23, and FY24 is estimated to be between a benefit of \$9,400 and a cost of \$21,620. There are 94 facilities that have an exemption through their approval order and it's their choice to either keep the approval order or switch to permit-by-rule. Cancelling an existing approval order requires producers to enroll in the permit-by-rule system. The one-time fee to cancel an approval order ranges from \$220 to \$550. This could increase state revenue by between \$20,680 and \$51,700, but is offset by the elimination of the \$150 approval order annual fee per facility - \$14,400 total. The number of facilities that will choose to move to the permit-by-rule system is unknown, but the incentive structure makes switching cost effective in less than 4 years. The exact cost for each facility to switch is also unknown, but DAQ anticipates that the fiscal impact on the state budget will fall within the range outlined above.

B) Local governments:

This rule change is not expected to have any fiscal impact on local governments because this rule is not applicable to them.

C) Small businesses ("small business" means a business employing 1-49 persons):

This rule change may impact up to 8 small businesses that own and operate oil and gas wells in Utah. The one-time cost to implement the control measures required by this rule is approximately \$106,000 per well. This estimate comes from a regulatory analysis performed by EPA on the Ouray and Unita Reservation FIP for putting controls on similar tanks. Emission inventory data indicate that as many as 160 wells may be impacted by this action. The proportion of these wells operated by small businesses is unknown, but believed to be small. The fiscal impact of this change is unknown because the number of operating wells and production levels varies greatly in response to global market fluctuation. Facilities with an existing approval order who choose to cancel their permit will also incur a one-time fee between \$220 and \$550, but will no longer be required to pay an annual fee of \$150. The number of facilities that will choose this option is unknown, therefore the fiscal impact on this

group is unknown. Existing wells producing more than 8,000 barrels per year are currently required to implement these controls and will experience no fiscal impact from this change. Wells producing less than 3,200 barrels of crude oil or 2,000 barrels of condensate per year are exempt and will see no fiscal impact from this change. Manufacturers, distributors, and installers of emissions control equipment may also receive a benefit from this rulemaking.

D) Non-small businesses ("non-small business" means a business employing 50 or more persons):

This rule change may impact up to 12 non-small businesses that own and operate oil and gas wells in Utah. Emission inventory data indicate that as many as 160 wells may be impacted by this action. The proportion of these wells operated by non-small businesses is unknown. The fiscal impact of this change is unknown because the number of operating wells and production levels varies greatly in response to global market fluctuation. Facilities with an existing approval order who choose to cancel their permit will also incur a one-time fee between \$220 and \$550, but will no longer be required to pay an annual fee of \$150. The number of facilities that will choose this option is unknown, therefore the fiscal impact on this group is unknown. Existing wells producing more than 8,000 barrels per year are currently required to implement these controls and will experience no fiscal impact from this change. Wells producing less than 3,200 barrels of crude oil or 2,000 barrels of condensate per year are exempt and will see no fiscal impact from this change. Manufacturers, distributors, and installers of emissions control equipment may also receive a benefit from this rulemaking.

E) Persons other than small businesses, non-small businesses, state, or local government entities ("person" means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an agency):

This rule change is not expected to have any fiscal impact on persons other than small businesses, non-small businesses, state, or local government entities because the proposed changes apply only to business operating in the gas and oil industry.

F) Compliance costs for affected persons (How much will it cost an impacted entity to adhere to this rule or its changes?):

The compliance costs for affected persons is expected to be approximately \$106,000 per well. This estimate comes from a regulatory analysis performed by EPA on the Ouray and Unita Reservation FIP for putting controls on similar tanks.

G) Comments by the department head on the fiscal impact this rule may have on businesses (Include the name and title of the department head):

After a thorough analysis and engagement with impacted parties, the Division of Air Quality has determined that the amendments to R307-506 will have fiscal impacts on businesses. The analysis shows that up to eight small businesses and 12 non-small businesses will be impacted by the proposed changes. However, the proposed amendments are appropriate and necessary to comply with the requirements of the Clean Air Act relating to reducing Ozone in the Uinta Basin.

Kimberly D. Shelley, Executive Director of the Utah Department of Environmental Quality

6. A) Regulatory Impact Summary Table (This table only includes fiscal impacts that could be measured. If there are inestimable fiscal impacts, they will not be included in this table. Inestimable impacts will be included in narratives above.)

Regulatory Impact Table				
Fiscal Cost	FY2022	FY2023	FY2024	
State Government	\$0	\$0	\$0	
Local Governments	\$0	\$0	\$0	
Small Businesses	\$0	\$0	\$0	
Non-Small Businesses	\$0	\$0	\$0	
Other Persons	\$0	\$0	\$0	
Total Fiscal Cost	\$0	\$0	\$0	
Fiscal Benefits				
State Government	\$0	\$0	\$0	
Local Governments	\$0	\$0	\$0	
Small Businesses	\$0	\$0	\$0	
Non-Small Businesses	\$0	\$0	\$0	
Other Persons	\$0	\$0	\$0	
Total Fiscal Benefits	\$0	\$0	\$0	
Net Fiscal Benefits	\$0	\$0	\$0	

B) Department head approval of regulatory impact analysis:

The Executive Director of the Department of Environmental Quality, Kim Shelley, has reviewed and approved this fiscal analysis.

Citation Information

7. Provide citations to the statutory authority for the rule. If there is also a federal requirement for the rule, provide a citation to that requirement:			
19-2-104			

Incorporations by Reference Information

(If this rule incorporates more than two items by reference, please include additional tables.)

8. A) This rule adds, updates, or rem		e of materials in	corporated by references (a copy of materia	
ncorporated by reference must be subm	First Incorporation		s, II riorie, leave plarik):	
Official Title of Materials Incorporat				
(from title page				
Date Issu				
Issue, or versi	on			
			rporated by references (a copy of materials	
ncorporated by reference must be subm			s; if none, leave blank):	
	Second Incorpora	tion		
Official Title of Materials Incorpora	ted			
(from title pa				
Publis	her			
Date Issu	ıed			
Issue, or vers	ion			
	Public Notic	e Information		
. The public may submit written or o	ral comments to the a	gency identified	in box 1. (The public may also request a	
nearing by submitting a written request to				
A) Comments will be accepted until (r			5/31/2022	
B) A public hearing (optional) will be	held:			
On (mm/dd/yyyy):	At (hh:mm AM/PM)	:	At (place):	
May 24, 2022	1:00PM		https://meet.google.com/ozt-syme- rum?hs=122&authuser=0	
0. This rule change MAY become eff				
			changes effective. It is NOT the effective date the Office of Administrative Rules on or befor	
he date designated in Box 10.				
	Agency Authoriz	ration Informatio	on	
	n this form is required	by Sections 63G-	3-301, 302, 303, and 402. Incomplete forms	
			Utah State Bulletin and delaying the first	
Agency head or Bryce C. Bird, Dire	ector	Date	04/06/2022	
lesignee, and title:		(mm/dd/yyyy):	0 3 2022	
7 Engineers and a Constitution of the Constitution				
7. Environmental Quality, Air Quality				
7-506. Oil and Gas Industry: Storag 7-506-1. Purpose.	e vessei.			
	nents to control emissi	ons of volatile or	ganic compounds (VOCs) from storage vesse	

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associated with a well site.

R307-506-2. Definitions.

"Centralized Tank Battery" means a separate tank battery surface site collecting crude oil, condensate, intermediate hydrocarbon liquids, or produced water from wells not located at the well site.

"Emergency Relief Storage Vessel" means a storage vessel receiving oil, condensate, or produced water as a result of emergency situations, process upsets, or other equipment malfunctions.

"Emergency Situations" means temporary, infrequent and unavoidable situation in which is uncontrollable or necessary to avoid risk of an immediate and substantial adverse impact on safety, public health, or the environment and is an unanticipated event or failure that is out of the operator's control and is not due to operator negligence.

"Modification to a well site" means;

- (1) a new well is drilled at an existing well site,
- (2) a well at an existing well site is hydraulically fractured, or
- (3) a well at an existing well site is hydraulically refractured.

"Storage Vessel" means storage vessel as defined in 40 CFR 60.5430a, Subpart OOOOa Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution, which is incorporated by reference in Rule R307-210.

"Uncontrolled emissions" means actual emissions or the potential to emit without consideration of controls.

R307-506-3. Applicability.

- (1) Rule R307-506 applies to each storage vessel located at a well site as defined in 40 CFR 60.5430a, Subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution.
 - (2) Rule R307-506 [shall apply to applies to each storage vessel located at centralized tank batteries.
 - (3) R307-506 does not apply to storage vessels that are subject to an approval order issued under R307-401-8.]

R307-506-4. Storage Vessel Requirements.

- (1) Thief hatches on storage vessels shall be kept closed and latched except during vessel unloading or other maintenance activities.
- (2) All storage vessels [located at a well site that are in operation as of January 1, 2018,] subject to Rule R307-506 with a site-wide throughput of 8,000 barrels or greater of crude oil or 2,000 barrels or greater of condensate per year on a rolling 12-month basis shall comply with Subsection R307-506-4(2)(a) [unless the exemption in R307-506-4(2)(b) applies.] Effective January 1, 2023, all storage vessels subject to Rule R307-506 with a site-wide throughput of 3,200 barrels or greater of crude oil or 2,000 barrels or greater of condensate per year on a rolling 12-month basis shall comply with Subsection R307-506-4(2)(a).
- (a) VOC emissions from storage vessels <u>in service</u> shall either be routed to a process unit where the emissions are recycled, incorporated into a product and [/or] recovered, or be routed to a VOC control device that is in compliance with <u>Rule</u> R307-508.
- (b) All storage vessels located at a well site shall be exempt from <u>Subsection</u> R307-506-4(2)(a) if combined VOC emissions from the storage vessels are demonstrated to be less than four tons per year of uncontrolled emissions on a rolling 12-month basis.
- (i) VOC working and breathing losses, and flash emissions <u>from storage vessels</u> shall be calculated using direct site-specific sampling data and any software program or calculation methodology in use by industry that is based on AP-42 Chapter 7.
- (3) <u>Upon startup of operation of a well site or centralized tank battery</u>[All storage vessels that begin operations on or after <u>January 1, 2018</u>, are required to control] VOC emissions <u>from all storage vessels shall be controlled</u> in accordance with <u>Subsection</u> R307-506-4(2)(a) [upon startup of operation] for a minimum of one year.
- (4) An emergency <u>relief</u> storage vessel located at a well site shall be exempt from <u>Subsection</u> R307-506-4(2)(a), if it meets the following requirements:
 - (i) The emergency relief storage vessel shall not be used as an active storage [tank]vessel.
- (ii) The owner or operator shall empty the emergency storage <u>relief</u> vessel no later than [15 days]48 hours after receiving fluids.
 - (iii) The emergency relief storage vessel shall be equipped with a liquid level gauge or equivalent device.
- (5) An owner or operator that is required to control emissions in accordance with <u>Subsections</u> R307-506-4(2) and R307-506-4(3) shall inspect at least once a month each closed vent system, including vessel openings, thief hatches, <u>pressure relief devices</u> and bypass devices, for defects that can result in air emissions according to 40 CFR 60.5416a(c).
 - (a) If defects are discovered, the defects shall be corrected or repaired within 15 days of identification.
- (6) Modification to a well site shall require a re-evaluation of site-wide throughput and [/or] emissions in accordance with Subsection R307-506-4(2).
- (7) After a minimum of one year of [operation,]startup of a well site or centralized tank battery, storage vessel controls may be removed if site-wide throughput is less than [8,000]3,200 barrels of crude oil or 2,000 barrels of condensate on a rolling 12-month basis or uncontrolled actual emissions are demonstrated to be less than four tons per year.

R307-506-5. Recordkeeping and Reporting.

- (1) Records of each closed vent system inspection, including vessel openings, thief hatches, pressure relief devices and bypass device shall be kept for three years.
- (a) Records of each closed vent system inspection, including vessel openings, thief hatches, pressure relief devices and bypass device shall include the date of the inspection, the status of each closed vent system, including vessel openings, thief hatches, pressure relief devices and bypass device, and the date of corrective action taken if required.
- (2) Records of crude oil throughput shall be kept for three years and shall be determined on a monthly basis using the production data reported to the Utah Division of Oil, Gas, and Mining.
- (3) Records of emission calculations, actual emissions, and site-specific sampling data used to determine compliance with <u>Subsection</u> R307-506-4(2)(b) shall be <u>provided to the Utah Division of Air Quality before removal of control equipment and kept for a period of three years, post registration.</u>
 - (4) Records of emergency <u>relief</u> storage vessel usage shall be kept for a period of three years.
- (a) Records of emergency <u>relief</u> storage vessel usage shall include the date the vessel received fluids or was discovered to have received fluids, the date the overflow tank was emptied, and the volume of fluids emptied in barrels.

KEY: air pollution, oil, gas
Date of Last Change: 2022[March 5, 2018]
Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

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